

Appl. No. 10/667,878
Atty. Docket No. CM2517M2C
Amdt. dated 03/30/2005
Reply to Office Action of 12/14/2004
Customer No. 27752

REMARKS

Application Amendments

Claims 1-8 and 10-30 are pending in the present application. Claim 9 has been previously canceled. No additional claims fee is believed to be due.

Claims 1, 16, 17, 19, and 28 have been amended as shown above to recite that the respective compositions comprise an oxidizing agent "consisting of one or more water-soluble inorganic peroxygen oxidizing agents". Support for this amendment can be found at page 17, lines 3-6 and lines 9-17 of the specification. Additional support can be found at page 4, lines 8-18 of the specification.

It is believed these changes do not involve any introduction of new matter. Consequently, entry of these changes is believed to be in order and is respectfully requested.

Provisional Double Patenting Rejection Over Co-Pending US Application No. 10/667,958

Claims 1, 3-5, 9-22, and 26-30 remain provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 and 12-14 of co-pending US Application No. 10/667,958.

A properly executed terminal disclaimer in compliance with 37 CFR 1.321(c) has been filed with this paper. Therefore, it is believed that this provisional rejection has been obviated.

Rejections Under 35 USC 102(b) and 103(a) Over US Patent No. 6,004,355 to Dias et al.

Claims 1-8, 11-15, 17, 19-27, and 29 remain rejected under 35 USC 102(b) as being anticipated by, or, alternatively, under 35 USC 103(a) as being obvious over, US Patent No. 6,004,355 to Dias et al. ("Dias"). As set forth in the Office Action of July 14, 2004, the Examiner asserts that Dias teaches a hair coloring composition comprising an oxidizing agent and a sequestrant (chelant), wherein the composition has a pH of 10, wherein the composition is an aqueous solution, wherein the oxidizing agent comprises from 0.1% to 4% of aqueous hydrogen peroxide, wherein the chelant is present at an amount from 0.01% to 10%, and wherein the composition further comprises an oxidative

Appl. No. 10/667,878
Atty. Docket No. CM2517M2C
Amdt. dated 03/30/2005
Reply to Office Action of 12/14/2004
Customer No. 27752

dye precursor. The Examiner also asserts that Dias teaches a kit comprising an oxidizing agent and one or more coloring agents.

The Examiner then asserts that because Dias teaches the same hair treating ingredients of Applicants' claimed composition, the compositions of Dias would inherently have the same physical properties of damage benefit, log ratio, hydrogen peroxide decomposition ratio, normalized shine ratio, and ability to form a hexadentate complex with Cu^{2+} . Thus, the Examiner concludes that Dias anticipates Applicants' claims. Alternatively, the Examiner asserts that it would be obvious to one of skill in the art that the compositions of Dias would have similar physical properties as those claimed by Applicants, absent unexpected results. Applicants respectfully traverse the present rejection based on the following comments.

As currently amended, Applicants' claim 1 recites a composition comprising (i) an oxidizing agent *consisting of one or more water-soluble inorganic peroxygen oxidizing agents* and (ii) a chelant, wherein the composition has a pH from about 9.5 to about 11, and wherein the chelant is in an amount sufficient to provide a damage benefit of less than about 160 cysteic acid units *as measured by the FT-IR Damage Assessing Protocol after a 5-Cycle Oxidative Hair Treatment Protocol With 2 Intermediate Washes*. Applicants' compositions provide a good lightening effect to hair during oxidative treatments, such as bleaching and dyeing, which are carried out in the pH range claimed by Applicants, yet result in less damage to the hair than that which occurs during the use of known oxidative treatment compositions. It is believed that the chelants in Applicants' compositions act to chelate environmental and intrinsic heavy metal ions which would otherwise react with the oxidizing agent to give harmful species, such as free radicals, which damage the hair by oxidizing the disulfide bonds of hair.

Dias discloses hair color compositions which require as components a peroxygen oxidizing agent, *an organic peroxyacid oxidizing aid*, and oxidative hair color agents. As is demonstrated in the Declaration of Jennifer Mary Marsh ("the Marsh Declaration") submitted herewith, the tested products based on the compositions of Dias and at pH 8 (*i.e.*, Products 1 and 2) are about three times more damaging per unit of lightening achieved, at the total oxidant level required by the 5-Cycle Oxidative Hair Treatment Protocol With 2 Intermediate Washes, as compared to an exemplary composition of the present invention (*i.e.*, Product 5). Additionally, the Marsh Declaration demonstrates that

Appl. No. 10/667,878
Atty. Docket No. CM2517M2C
Amdt. dated 03/30/2005
Reply to Office Action of 12/14/2004
Customer No. 27752

the tested product based on the compositions of Dias and at pH 10 (i.e., Product 3) is almost two times more damaging per unit of lightening achieved, at the total oxidant level required by the 5-Cycle Oxidative Hair Treatment Protocol With 2 Intermediate Washes, as compared to Product 5. Moreover, Product 3 provided a damage benefit, as measured by the FT-IR Damage Assessing Protocol, of 173 cysteic acid units, which is greater than Applicants' claimed level of damage benefit of less than about 160 cysteic acid units for compositions having a pH from about 9.5 to about 11. Accordingly, the Marsh Declaration demonstrates that the compositions of Dias, which require an organic peroxyacid as part of the oxidizing system, do not inherently possess the same physical properties, such as a damage benefit, as the compositions of the present invention, which comprise an oxidizing agent consisting of one or more water-soluble inorganic peroxygen oxidizing agents.

As a result, each and every element of Applicants' claim 1, as well as claims 2-8, 11-15, and 17, which contain the limitations of claim 1, is not disclosed in Dias. Additionally, an argument analogous to that for claim 1 applies to Applicants' claim 19, as well as claims 20-27 and 29, which contain the limitations of claim 19. Therefore, Applicants' claims 1-8, 11-15, 17, 19-27, and 29 are novel over Dias.

In addition, Applicants' claimed invention is not obvious in view of Dias because the Marsh Declaration demonstrates that the compositions of the present invention possess superior and unexpected properties over the compositions of Dias. As discussed above, Product 5 is about three times less damaging per unit of lightening achieved as both Products 1 and 2. Similarly, Product 5 is almost two times less damaging per unit of lightening achieved as Product 3. Applicants respectfully submit that such lightening and hair damage results are clearly superior over the performance of the compositions of Dias, and, as a result, Applicants' claimed invention is not obvious in view of Dias.

Therefore, Applicants' claims 1-8, 11-15, 17, 19-27, and 29 are novel and nonobvious over Dias.

Rejections Under 35 USC 103(a) Over US Patent No. 6,004,355 to Dias et al. in view of US Patent No. 5,100,436 to Wenke

Claim 10 remains rejected under 35 USC 103(a) as being unpatentable over US Patent No. 6,004,355 to Dias et al. ("Dias") in view of US Patent No. 5,100,436 to Wenke

Appl. No. 10/667,878
Atty. Docket No. CM2517M2C
Amdt. dated 03/30/2005
Reply to Office Action of 12/14/2004
Customer No. 27752

("Wenke"). As set forth in the Office Action of July 14, 2004, the Examiner asserts that Dias teaches hair coloring compositions, as described above, wherein the compositions are thickened aqueous compositions. The Examiner notes that Dias does not teach a hair treatment composition in the form of an oil-in-water emulsion. Then, the Examiner asserts that Wenke teaches a composition comprising oxidative dye precursors, oxidizing agents, and chelating agents, wherein the composition may be in the form of an emulsion, suspension, lotion, or gel. Thus, the Examiner concludes that it would have been obvious to one of skill in the art to formulate the composition of Dias in an emulsion because Wenke teaches different forms of hair dyeing compositions, absent unexpected results. Applicants respectfully traverse the present rejection based on the following comments.

The combination of Dias and Wenke does not teach or suggest all of Applicants' claim limitations and, therefore, does not establish a *prima facie* case of obviousness (MPEP 2143.03). Applicants' claim 10 contains the limitations of claim 1. As discussed above, the Marsh Declaration demonstrates that the compositions of Dias, which require an organic peroxyacid as part of the oxidizing system, do not inherently possess the same physical properties, such as a damage benefit, as the compositions of the present invention, which comprise an oxidizing agent consisting of one or more water-soluble inorganic peroxygen oxidizing agents.

Additionally, although Wenke discloses that its compositions may be in the form of an emulsion, one of skill in the art would not be motivated to formulate the composition of Dias into an emulsion because the peroxyacid oxidizing aids of Dias, which are required components of the compositions of Dias, are difficult to solubilize, especially in an oil-in-water emulsion.

Therefore, the combination of Dias and Wenke fails to establish a *prima facie* case of obviousness with respect to Applicants' currently amended claim 1, as well as Applicants' claim 10. As a result, Applicants' claim 10 is novel and nonobvious over Dias in view of Wenke.

Alternatively, Applicants' claim 10 is not obvious over Dias in view of Wenke because, as discussed above, the Marsh Declaration demonstrates that the compositions of the present invention possess superior and unexpected properties over the compositions of Dias. Although Wenke discloses that its hair coloring compositions may be in the form

Appl. No. 10/667,878
Atty. Docket No. CM2517M2C
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Customer No. 27752

of emulsions, suspensions, lotions, or gels, Wenke fails to provide a teaching or suggestion for achieving the superior results of Applicants' claimed compositions.

Therefore, Applicants' claim 10 is novel and nonobvious over the combination of Dias and Wenke.

Rejections Under 35 USC 103(a) Over US Patent No. 6,004,355 to Dias et al.

Claims 16, 18, 28, and 30 remain rejected under 35 USC 103(a) as being unpatentable over US Patent No. 6,004,355 to Dias et al. ("Dias"). The Examiner asserts that Dias teaches methods for coloring hair comprising the steps of applying compositions that comprise an oxidizing agent, oxidation dye precursors, and chelating agents. The Examiner notes that Dias does not teach Applicants' claimed methods with sufficient specificity to constitute anticipation of the claims. However, the Examiner asserts that it would have been obvious to one of skill in the art to use the methods of Dias with a composition that comprises similar ingredients to the compositions of Dias. Applicants respectfully traverse the present rejection based on the following comments.

As currently amended, Applicants' claim 16 recites a method which requires (i) applying a first composition comprising an oxidizing agent *consisting of one or more water-soluble inorganic peroxygen oxidizing agents*, (ii) applying a second composition comprising a chelant wherein the chelant is in an amount sufficient *to provide a damage benefit of less than 160 cysteic acid units* as claimed, and (iii) applying a third composition comprising an oxidizing agent *consisting of one or more water-soluble inorganic peroxygen oxidizing agents*, wherein said first and third compositions have a pH from about 9.5 to about 11, and wherein the steps are carried out as claimed.

In contrast, Dias discloses methods which comprise applying hair color compositions comprising a peroxygen oxidizing agent, *an organic peroxyacid oxidizing aid*, and oxidative hair color agents, wherein the compositions impart minimal damage to hair fibers at lower pH.

As discussed above, the Marsh Declaration demonstrates that the compositions of Dias, which require an organic peroxyacid as part of the oxidizing system, do not inherently possess the same physical properties, such as a damage benefit, as the compositions of the present invention, which comprise an oxidizing agent consisting of one or more water-soluble inorganic peroxygen oxidizing agents. Additionally, the

Appl. No. 10/667,878
Atty. Docket No. CM2517M2C
Amdt. dated 03/30/2005
Reply to Office Action of 12/14/2004
Customer No. 27752

Marsh Declaration demonstrates that the compositions of the present invention possess superior and unexpected properties over the compositions of Dias. Product 5 is about three times less damaging per unit of lightening achieved as both Products 1 and 2, and almost two times less damaging per unit of lightening achieved as Product 3.

Accordingly, Applicants' claim 16 would not have been obvious to one of ordinary skill in the art. Claim 18 contains the limitations of claim 1, which was discussed above. Additionally, an argument analogous to that for claim 16 applies to the method of claim 28. Claim 30 contains the limitations of claim 19, which was discussed above. Therefore, Applicants' claims 16, 18, 28, and 30 are novel and nonobvious over Dias.

CONCLUSION

In light of the amendments and remarks presented herein, it is requested that the Examiner reconsider and withdraw the present rejections. Early and favorable action in the case is respectfully requested.

Applicant has made an earnest effort to place their application in proper form and to distinguish the invention as now claimed from the applied references. In view of the foregoing, Applicant respectfully requests reconsideration of this application, entry of the amendments presented herein, and allowance of Claims 1-8 and 10-30.

Respectfully submitted,
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